

Conservation of ENERGY

ENERGY CAN NOT BE
Created or Destroyed

But it CAN Change forms
(Converted from 1 form to Another)

FIRST LAW of Thermodynamics

LIST DIFFERENT FORMS OF ENERGY

Light

heat

SOLAR / SUN

CARBS / FOOD

TIDAL

Chemical

Nuclear / RADIOACTIVE

SOUND

Mechanical

COAL

WIND

Kinetic energy

Geothermal

hydroelectric / Dam

Electric

Bio Fuels

GASOLINE

NAT. GAS

POTENTIAL

GASOLINE
Fuel
+
Oxygen

Chemical
Potential

COMBUSTION
+ SPARK →

+ electrical

PISTON + heat
MOTION
+ SOUND

mechanical
+
heat +
SOUND

2nd Law of Thermodynamics
heat moves from hot to cold

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VARIABLES: Something that changes

$$y = mx + b$$

↑ SLOPE
y-INTERCEPT

y + x
ARE VARIABLES



CONSTANT:

Something that
Does NOT Change

EX: SLOPE IS CONSTANT (m)
y-INTERCEPT IS CONSTANT (b)

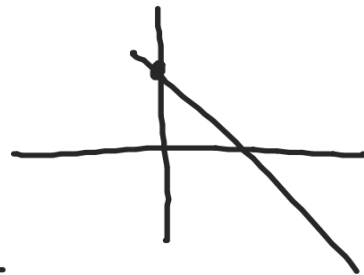
INDEPENDENT VARIABLE

"I" CAN change

"X" is independent variable

$$y = mx + b$$

↑ ↓ const



Dependent VARIABLE

Changes During experiment

"y" is the Dependent

When we graph
MOST of the time the
INDEPENDENT VARIABLE is going to
Be ON THE HORIZONTAL "X" Axis

DEPENDENT VARIABLE IS going to be
ON THE VERTICAL "Y" Axis.



Be fore



1 month
LATER

CONSTANTS?

INDEPENDENT VAR.

DEPENDENT VAR.